

|                    |            |
|--------------------|------------|
| <i>E. coli</i> DNA | 13858±3143 |
| Calf Thymus DNA    | <50        |
| CpG S-ODN          | 20715±606  |
| non-CPG S-ODN      | <50        |

Mice (2 mice/group) were i.v. injected with 100 µl of PBS, 200 µg of *E. coli* DNA or calf thymus DNA, or 500 µg of CpG S-ODN or non-CpG control S-ODN. Mice were bled 2 hr after injection and 1:10 dilution of each serum was analyzed of IL-6 ELISA. Sensitivity limit of IL-6 ELISA was 5 pg/ml. Sequences of the CpG S-ODN is 5'GCATGACGTTGAGCT3' (SEQ. ID. No: 6) and of the non-stimulatory S-ODN is 5'GCTAGATGTTAGCGT3' (SEQ. ID. NO: 4). Note that although there is a CpG in sequence 48, it is too close to the 3' end to effect stimulation, as explained herein. Data represent mean ±SD of duplicates. The experiment was done at least twice with similar results.

Please substitute the following paragraph for the paragraph beginning on page 41, line

10.

**Table 13. Induction of human IL-12 secretion by Phosphorothioate CpG ODN**

| ODN         | sequence (5'-3')          | SEQ ID NO: | IL-12 (pg/ml) |         |
|-------------|---------------------------|------------|---------------|---------|
|             |                           |            | expt. 1       | expt. 2 |
| cells alone |                           |            | 0             | 0       |
| 1962        | TCCTGTCGTTCCCTTGTCGTT     | 52         | 19            | 0       |
| 1965        | TCCTGTCGTTTTTTTGTCGTT     | 53         | 36            | 0       |
| 1967        | TCGTCGCTGTCTGCCCTTCTT     | 119        | 41            | 0       |
| 1968        | TCGTCGCTGTTGTCGTTTCTT     | 120        | 24            | 0       |
| 2005        | TCGTCGTTGTCGTTGTCGTT      | 47         | 25            | 0       |
| 2006        | TCGTCGTTTTTGTCGTTTTGTCGTT | 46         | 29            | 15      |
| 2014        | TGTCGTTGTCGTTGTCGTT       | 50         | 28            | 0       |
| 2015        | TCGTCGTCGTCGTT            | 51         | 14            | 0       |
| 2016        | TGTCGTTGTCGTT             | 85         | 3             | 0       |

PBMC were collected from normal donors and spun over Ficoll, then cultured at  $10^6$  cells/well in 96 well microtiter plates with or without the indicated ODN which were added to cultures at 6 µg/ml. Supernatants were collected at 24 hr and tested for IL-12 levels by ELISA as described in methods. A standard curve was run in each experiment, which represents a different donor.

Applicants have attached marked-up versions of the paragraphs below, with inserted text underlined.